

Nicholas A. Toumpas Commissioner

Nancy L. Rollins Associate Commissioner

STATE OF NEW HAMPSHIRE DEPARTMENT OF HEALTH AND HUMAN SERVICES DIVISION OF COMMUNITY BASED CARE SERVICES

BUREAU OF BEHAVIORAL HEALTH

105 PLEASANT STREET, CONCORD, NH 03301 603-271-5000 1-800-852-3345 Ext. 5000 Fax: 603-271-5058 TDD Access: 1-800-735-2964

Improving the health of people with serious mental illness in 2009:
Review and recommendations regarding
health behaviors and antipsychotic medications for prescribers

Accumulating evidence has documented growing rates of cardiovascular disease and early mortality among people with serious mental illness (SMI): people with SMI are dying 10-25 years younger than those in the general population (1, 2). Why? People with SMI are experiencing the American epidemic of obesity and diabetes at a higher rate than the general public. These health problems most likely contribute to the development of cardiovascular disease and can be addressed with health behavior change. A variety of programs that address diet and exercise, including those that support patients by utilizing a health coach, have shown promise for helping patients eat healthier and be more active, leading to improvements in cardiovascular health (3, 4). Patients need education, encouragement and support to maintain or improve diet and exercise behaviors.

The other likely cause of early morbidity and mortality in this group is their high rate of smoking. Patients with SMI need education and encouragement to quit smoking. New research has demonstrated that smoking cessation strategies work well in people with SMI, but they may need to be offered repeatedly before patients utilize them, and they may need to be utilized at higher doses or for longer periods of time than is typical in the general population (5). Nicotine replacement, bupropion, or varenicline in combination with support groups or behavioral quit strategies should be offered regularly to patients who smoke.

Antipsychotic medications are an important part of the treatment of individuals with psychotic illnesses. Research demonstrates the ability of these medications to reduce a variety of illness symptoms and to improve functioning over time. Research has also accumulated demonstrating that antipsychotic medication efficacy and side effects appear to be unique to individual medications rather than defined by whether a medication belongs to the "first generation" or "second generation" class (6). Four recent government-funded studies evaluated recovery outcomes and side effects of second generation antipsychotics compared to first generation antipsychotics (7-10). This studies were controversial because they demonstrated that treatment with first generation antipsychotic medication resulted in similar improvements in symptoms, quality of life, and recovery as treatment using second generation medications (excepting clozapine, which is proven to be more effective for treatment resistant psychosis). This research is being considered by national leaders who are now revising recommendations for antipsychotic treatment strategies. Additionally, each antipsychotic medication has potential for a unique set of side effects (6). Thus the choice of an antipsychotic medication must involve consideration of each patient's values, preferences, and unique medical situation, as well as the prescriber's knowledge of the potential efficacy, side effects, and interactions of each particular

medication (11). Antipsychotic treatment should involve a discussion between the individual and his/her prescriber regarding potential health risks and mental health benefits of each medication treatment option during ongoing informed consent.

The potential for some of the second generation antipsychotic medications (clozapine, quetiapine, olanzapine and risperidone) to cause weight gain, hypertriglyceridemia, insulin resistance and diabetes in a substantial number of patients who take them has been widely demonstrated (6). These side effects are not dose related and have been cause for great concern because these changes in metabolic function increase risk for cardiovascular disease and early mortality. Explicit recommendations delineate regular monitoring of cardiometabolic risk factors in patients taking antipsychotic medication (12). Once detected, a variety of strategies, including switching agents, can be used to address them (3, 4). First and second generation antipsychotic medications with lower rates of potential cardiometabolic side effects should be considered for treatment of patients with psychosis. Antipsychotic medication side effects must be monitored regularly following these American Psychiatric Associate/American Diabetes Association guidelines and addressed if they occur.

Clinicians often utilize combination treatment with two or more antipsychotic medications in attempts to help patients control symptoms, manage side effects and improve functioning. However, recent analyses of blinded, controlled studies comparing combination treatment of patients with schizophrenia to treatment with one antipsychotic have demonstrated little benefit conferred by combination treatment (13, 14). Furthermore, combination treatment exposes patients to potential risks and side effects related to two medications rather than just one. Treatment guidelines do not recommend combination treatment as a long-term strategy (15) unless the patient has treatment resistant symptoms that have failed multiple approaches, including clozapine (16). People with treatment-resistant psychosis should be provided evidence-based strategies, such as clozapine.

Based on the current state of knowledge, the following are recommended:

- 1. Engage and support patients in proactive healthy diet and exercise behaviors.
- 2. Address smoking status on a regular basis. Offer support, referral and treatment for smoking cessation.
- 3. Discuss and weigh potential health risks and mental health benefits of each medication treatment option with patients (and their family/support person if desired).
- 4. When prescribing antipsychotic medication, systematically monitor patients for cardiometabolic status at APA-recommended intervals.
- 5. Utilize antipsychotic monotherapy (one antipsychotic medication rather than combination treatment with two or more agents) unless psychosis symptoms do not respond to evidence based treatment strategies (including clozapine) and the combination confers clear benefits that outweigh the potential risks (including cardiometabolic risks).

A review of the literature and discussion by experts occurred a recent conference *Update on Antipsychotics* and can be viewed at http://www.dhslides.org/psych/default.asp.

References:

- 1. Saha S, Chant D, McGrath J: A systematic review of mortality in schizophrenia. Archives of General Psychiatry 2007; 64(10):1123-1131
- 2. Mauer B: Morbidity and mortality in people with serious mental illness, in Technical Reports. Edited by Parks J, Svendsen D, Singer P, Foti ME. Alexandria, National Associateion of State Mentlah Health Program Directors Medical Directors Council, 2006
- 3. Faulkner G, Cohn TA: Pharmacologic and nonpharmacologic strategies for weight gain and metabolic disturbance in patients treated with antipsychotic medications.[erratum appears in Can J Psychiatry. 2006 Aug;51(9):620]. Canadian Journal of Psychiatry Revue Canadienne de Psychiatrie 2006; 51(8):502-11
- 4. Ruter TJ: Obesity reduction and prevention strategies for individuals with serious mental illness, in Series of Technical Reports. Edited by Parks J, Radke AQ. Alexandria, VA, National Association of State Mental Health Program Directors, 2008
- 5. Ferron JC, Alterman A, McHugo GJ, Brunette MF, Drake RE: A review of research on smoking cessation interventions for adults with schizophrenia spectrum disorders. Mental Health and Substance Abuse: Dual Diagnosis In Press; 2(1)
- 6. Leucht S, Corves C, Arbter D, Engel RR, Li C, Davis J: Second-generation versus first-generation antipsychotic drugs for schizophrenia: a meta-analysis. The Lancet 2008
- 7. Jones PB, Barnes TRE, Davies L, Dunn G, Lloyd H, Hayhurst KP, Murray RM, Markwick A, Lewis SW: Randomized controlled trial of the effect on quality of life of second vs first-generation antipsychotic drugs in schizophrenia. Archives General Psychiatry 2006; 63:1079-1087
- 8. Lieberman JA, Stroup TS, McEvoy JP, Swartz MS, Rosenheck RA, Perkins DO, Keefe RSE, Davis SM, Davis CE, Lebowitz BD, J. S, Hsiao JK, Investigators C: Effectiveness of antipsychotic drugs in patients with chronic schizophrenia. New England Journal of Medicine 2005; 353(12):1209-1223
- 9. Rosenheck R, Perlick D, Bingham S, Liu-Mares W, Collins J, Warren S, Leslie D, Allan E, Campbell EC, Caroff S, Corwin J, Davis L, Douyon R, Dunn L, Evans D, Frecska E, Grabowski J, Graeber D, Herz L, Kwon HK, Lawson W, Mena F, Sheikh J, Smelson D, Smith-Gamble V, Olanzapine ftDoVACSGotC-Eo: Effectiveness and cost of olanzapine and haloperidol in the treatment of schizophrenia. Journal of the American Medical Association 2003; 290:2603-2702
- 10. Sikich L, Frazier JA, McClellan J, Findling RL, Vitiello B, Ritz L, Ambler D, Puglia M, Maloney AE, Michael E, De Jong S, Slifka K, Noyes N, Hlastala S, Pierson L, McNamara NK, Delporto-Bedoya D, Anderson R, Hamer RM, Lieberman JA: Double-blind comparison of first- and second-generation antipsychotics in early-onset schizophrenia and schizo-affective disorder: findings from the treatment of early-onset schizophrenia spectrum disorders (TEOSS) study.[see comment]. American Journal of Psychiatry 2008; 165(11):1420-31
- 11. Mistler L, Drake RE: Shared decision making in antipsychotic management. Journal of Psychiatric Practice 2008; 14(6):333-344
- 12. American Diabetes A, American Psychiatric A, American Association of Clinical E, North American Association for the Study of O: Consensus development conference on antipsychotic drugs and obesity and diabetes.[see comment]. Journal of Clinical Psychiatry 2004; 65(2):267-72
- 13. Barbui C, Signoretti A, Mule S, Boso M, Cipriani A: Does the addition of a second antipsychotic drug improve clozapine treatment? Schizophrenia Bulletin 2008; doi:10.1093/schbul/sbn030
- 14. Correll CU, Rummel-Kluge C, Corves C, Kane JM, Leucht S: Antipsychotic combinations vs monotherapy in schizophrenia: A meta-analysis of randomized controlled trials. Schizophenia Bulletin 2008; 0: sbn018v2-sbn018
- 15. Stahl S, Grady M: A critical review of atypical antipsychotic utilization: comparing monotherapy with polypharmacy and augmentation. Current Medicinal Chemistry 2004; 11:313-327
- Moore TA, Buchanan RW, Buckley PF, Chiles JA, Conley RR, Crismon ML, Essock SM, Finnerty M, Marder SR, Miller DD, McEvoy JP, Robinson DG, Schooler NR, Shon SP, Stroup TS, Miller AL: The Texas Medication Algorithm Project antipsychotic algorithm for schizophrenia: 2006 update. Journal of Clinical Psychiatry 2007; 68(11):1751-62